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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,407	09/28/2001	Robert E. Haines	10012345-1	8759

7590 10/31/2007  
HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80572-2400

EXAMINER
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NGUYEN, TUAN HOANG

ART UNIT	PAPER NUMBER
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2618

MAIL DATE	DELIVERY MODE
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10/31/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

09/966,407

Applicant(s)

HAINES ET AL.

Examiner

Tuan H. Nguyen

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed on 08/21/2007 with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 112*

2. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Consider claim 12, the phrase "for **one or more** wireless network devices" renders the claims indefinite because if there is only **one** wireless network device it can not be "generate a list of wireless network devices" as recited in the claim which does not positively identify the claims limitation.

### *Claim Rejections - 35 USC § 103*

- 3 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4 Claims 1, 5, 12, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garceran et al. (US PAT. 6,522,888 hereinafter, "Garceran") in view of Comer (US PAT. 5,873,043).

Consider claim 1, Garceran teaches a method of identifying and prioritizing wireless network devices, the method comprising: detecting a signal from one or more wireless network devices, wherein each signal has at least one signal quality (col. 3 lines 8-25); querying for supplemental information from each of the detected wireless network devices (col. 3 lines 15-25 and col. 8 lines 57-61); identifying each of the detected wireless network devices that match a selection criteria using the supplemental information (col. 3 lines 15-25).

Garceran does not explicitly show that in response to identifying each of the detected wireless network devices that match the selection criteria, associating the at least one signal quality with its respective wireless network device for each wireless network device that matches the selection criteria; and prioritizing the wireless network devices that match the selection criteria based on their associated at least one signal quality.

In the same field of endeavor, Olkkonen teaches in response to identifying each of the detected wireless network devices that match the selection criteria, associating the at least one signal quality with its respective wireless network device for each wireless network device that matches the selection criteria (col. 6 lines 30-41 and col.

15 lines 24-41); and prioritizing the wireless network devices that match the selection criteria based on their associated at least one signal quality (col. 29 lines 28-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, in response to identifying each of the detected wireless network devices that match the selection criteria, associating the at least one signal quality with its respective wireless network device for each wireless network device that matches the selection criteria; and prioritizing the wireless network devices that match the selection criteria based on their associated at least one signal quality, as taught by Olkkonen, in order for the received page contains a predetermined characteristic and matches a corresponding mask maintained by the receiving device, then it responds by transitioning from a normal state to a receive device identifier state.

Consider claim 5, Garceran further teaches identifying each of the detected wireless network devices that match a selection criteria further comprises: generating a data structure comprising supplemental information associated with the detected wireless network devices (col. 3 lines 8-25); and searching the supplemental information to identify those detected wireless network devices that match the selection criteria (col. 3 lines 8-25).

Consider claim 12, Garceran teaches a method of identifying and prioritizing wireless network devices, the method comprising: detecting a wireless network device, wherein the wireless network device transmits a signal having a signal quality (col. 3

lines 8-25); querying the wireless network device to determine whether it is of a desired type (col. 3 lines 15-25 and col. 8 lines 57-61); querying the wireless network device to determine whether it has a desired status (col. 3 lines 15-25 and col. 8 lines 57-61); generating a list of wireless network devices that are of the desired type and have the desired status (col. 3 lines 32-45).

Garceran does not explicitly show that associating the signal quality with the wireless network device in response to determining that it is of the desired type and it has the desired status; and prioritizing the list of wireless network devices based at least on their associated signal quality.

In the same field of endeavor, Comer teaches associating the signal quality with the wireless network device in response to determining that it is of the desired type and it has the desired status (col. 6 lines 30-41 and col. 15 lines 24-41); and prioritizing the list of wireless network devices based at least on their associated signal quality (col. 29 lines 28-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, associating the signal quality with the wireless network device in response to determining that it is of the desired type and it has the desired status; and prioritizing the list of wireless network devices based at least on their associated signal quality, as taught by Comer, in order for the received page contains a predetermined characteristic and matches a corresponding mask maintained by the receiving device, then it responds by transitioning from a normal state to a receive device identifier state.

Consider claim 18, Garceran teaches a computer-usable medium having computer-readable instructions stored thereon capable of causing a processor to perform a method, the method comprising: for each of one or more transmitting wireless network devices, receiving a signal, wherein the signal has at least one signal quality (col. 3 lines 8-25); querying for supplemental information from each wireless network device associated with a received signal (col. 3 lines 15-25 and col. 8 lines 57-61); comparing the supplemental information with a selection criteria to determine whether any wireless network device matches the selection criteria (col. 3 lines 15-25).

Garceran does not explicitly show that if a wireless network device matches the selection criteria, associating that wireless network device and its supplemental information with its at least one signal quality; and prioritizing each wireless network device matching the selection criteria against other wireless network devices matching the selection criteria, wherein the prioritization is based on the at least one signal quality for each of the wireless network devices matching the selection criteria.

In the same field of endeavor, Comer teaches if a wireless network device matches the selection criteria, associating that wireless network device and its supplemental information with its at least one signal quality (col. 6 lines 30-41 and col. 15 lines 24-41); and prioritizing each wireless network device matching the selection criteria against other wireless network devices matching the selection criteria, wherein the prioritization is based on the at least one signal quality for each of the wireless network devices matching the selection criteria (col. 29 lines 28-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, if a wireless network device matches the selection criteria, associating that wireless network device and its supplemental information with its at least one signal quality; and prioritizing each wireless network device matching the selection criteria against other wireless network devices matching the selection criteria, wherein the prioritization is based on the at least one signal quality for each of the wireless network devices matching the selection criteria, as taught by Comer, in order for the received page contains a predetermined characteristic and matches a corresponding mask maintained by the receiving device, then it responds by transitioning from a normal state to a receive device identifier state.

5        Claims 2-4, 6, 8-11, 15-17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garceran et al. (US PAT. 6,522,888 hereinafter, "Garceran") in view of Comer and further in view of Olkkonen et al. (US PAT. 6,842,460 hereinafter, "Olkkonen").

Consider claim 2, Garceran and Comer in combination, fails to teaches detecting a signal from one or more wireless network devices further comprises broadcasting a request (read on "gathers information") from a reference network device and detecting a response from the one or more wireless network devices.

However, Olkkonen teaches detecting a signal from one or more wireless network devices further comprises broadcasting a request (read on "gathers



information") from a reference network device and detecting a response from the one or more wireless network devices (col. 21 lines 4-19).

Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Olkkonen into view of Garceran and Comer in order to provide a new short-range wireless device arrives within the communication range of any member of the ad hoc network, its inquiry signals are answered by a member detecting the inquiry.

Consider claim 3, Olkkonen further teaches the at least one signal quality includes a signal quality selected from the group consisting of a signal strength, a signal noise and a signal-to-noise ratio (col. 6 lines 44-51).

Consider claim 4, Olkkonen further teaches identifying each of the detected wireless network devices that match a selection criteria comprises at least one selection criterion selected from the group consisting of device type, device name, device features, device capabilities, device status, past device performance, available consumables, transaction costs and device permissions (col. 22 lines 34-38).

Consider claim 6, Olkkonen further teaches associating the at least one signal quality with its respective wireless network device for each wireless network device that matches the selection criteria further comprises associating each at least one signal quality with its respective wireless network device in the data structure prior to

searching the supplemental information to identify those detected wireless network devices that match the selection criteria (col. 6 lines 27-43).

Consider claim 8, Olkkonen further teaches prioritizing the wireless network devices that match the selection criteria based on their associated at least one signal quality further comprises prioritizing the wireless network devices that match the selection criteria based on a signal strength of the received signal such that the wireless network device associated with the highest signal strength receives the highest priority (col. 4 lines 60-67).

Consider claim 9, Olkkonen further teaches establishing communication with the wireless network device that matches the selection criteria and has the highest priority (col. 46 lines 51-60).

Consider claim 10, Olkkonen further teaches providing a list of the prioritized wireless network devices that match the selection criteria to a user (col. 47 lines 25-29); and establishing communication with a wireless network device selected from the prioritized list by the user (col. 47 lines 25-29).

Consider claim 11, Olkkonen further teaches highlighting a portion of the list of prioritized wireless network devices based on a signal quality of the detected signals (col. 4 lines 60-67).

Consider claim 15, Olkkonen further teaches establishing communications with the wireless network device of the prioritized list of wireless network devices that has the highest priority (col. 46 lines 51-60).

Consider claim 16, Olkkonen further teaches providing the prioritized list of wireless network devices to a user; and in response to a user selection of one of the wireless network devices of the prioritized list of wireless network devices, establishing communications with the selected wireless network device (col. 47 lines 25-29).

Consider claim 17, Olkkonen further teaches a portion of the prioritized list of wireless network devices is highlighted based on a second signal quality of the transmitted signals (col.4 lines 60-67).

Consider claim 19, Olkkanen further teaches the at least one signal quality comprises a signal strength and wherein the method further comprises: prioritizing the wireless network devices based on signal strength (col. 4 lines 60-67); and establishing communications with the wireless network device having the highest signal strength (col. 46 lines 51-60).

6 Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Garceran in view of Comer and further in view of Terlep et al. (U.S PAT. 5,796,777 hereinafter, "Terlep").

Consider claim 7, Garceran and Comer in combination, fails to teaches prioritizing the wireless network devices that match the selection criteria based on their associated at least one signal quality further comprises prioritizing the wireless network devices using a first sort order based on a first signal quality and using a second sort order based on a second signal quality.

However, Terlep teaches prioritizing the wireless network devices that match the selection criteria based on their associated at least one signal quality further comprises prioritizing the wireless network devices using a first sort order based on a first signal quality and using a second sort order based on a second signal quality (col. 1 lines 28-39).

Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Terlep into view of Garceran and Comer in order to provide for selecting one of the first and second digitized based on the first and second signal quality measurements.

7 Claims 13-14, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garceran in view of Comer and further in view of Dupray (U.S PUB. 2004/0266457).

Consider claim 13, Garceran and Comer in combination, fails to teaches the first signal quality is indicative of a relative distance to the transmitting device or a presumed quality of service available from the transmitting device.

However, Dupray teaches the first signal quality is indicative of a relative distance to the transmitting device or a presumed quality of service available from the transmitting device (page 29 [0347] and [0349]).

Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Dupray into view of Garceran and Comer in order to provide for locating a wireless mobile station using a plurality of mobile station location estimators.

Consider claim 14, Dupray further teaches the signal transmitted from each wireless network device further has at least one additional signal quality (page 31 [0367]).

Consider claim 20, Dupray further teaches attenuating each received signal if at least one of the received signals is saturated (page 32 [0382]).

### ***Conclusion***

Art Unit: 2618

8      **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9      Any response to this action should be mailed to:

Mail Stop \_\_\_\_\_ (Explanation, e.g., Amendment or After-final, etc.)

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Facsimile responses should be faxed to:

(571) 273-8300

Hand-delivered responses should be brought to:

Customer Service Window

Randolph Building

401 Dulany Street

Alexandria, VA 22313

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan H. Nguyen whose telephone number is (571)272-8329. The examiner can normally be reached on 8:00Am - 5:00Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Maung Nay A. can be reached on (571)272-7882882. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information Consider the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tuan Nguyen  
Examiner  
Art Unit 2618  
T.N.

  
NAY MAUNG  
SUPERVISORY PATENT EXAMINER